



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/751,620

01/06/2004

James George Allen

2451

7590

01/30/2006

Frank C. Leach, Jr.  
P. O. Box 22455  
Lexington, KY 40522

EXAMINER

MCCARRY JR, ROBERT J

ART UNIT

PAPER NUMBER

3617

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/751,620	ALLEN ET AL.	
	Examiner	Art Unit	
	Robert J. McCarry, Jr.	3617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-31 is/are allowed.
- 6) ☒ Claim(s) 1,2,32 and 33 is/are rejected.
- 7) ☒ Claim(s) 3-7,34 and 35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenbaum (US 4,326,750) in view of Werley (US 4,915,127) and further in view of Ward (US 5,359,942).

Rosenbaum discloses a door operator for a bottom-dumping vehicle. The system is comprised of a housing 136 supported by the vehicle and accommodates a double acting piston 142 that moves in a first direction and a second direction in and out of the housing 136 to open and close the door of the vehicle. The piston is operated by either compressed air or liquid and when the air or fluid is supplied or relieved the doors will open or close. A control assembly 152 operates in a first mode to supply air or fluid to the piston 142 and in a second mode to retrieve the air or fluid from the piston 142. The first mode, which supplies air or fluid to the piston, maintains the doors in a closed position while the second mode maintains the doors in an open position. The control assembly 152 allows for a predetermined amount of air or fluid to be applied to the pistons 142 to move the doors from one position to another. Column 7, lines 5-10 describes the control assembly to direct a controlled amount of compressed air or hydraulic fluid. The control assembly is connected to an air supply 154 by means of

Art Unit: 3617

input ports 166 and conduits 168, 170. Two output ports 174, 176 establish communication between the control assembly 152 and the pistons 142. The control system is further comprised of solenoids controlled by switches, which are controlled by the operator of the vehicle. The switches allow the operator to control the openings of the doors until the vehicle has reached a predetermined point. The system is also comprised of a pilot valve 156, which is responsive to pressure, and moves from a first state to a second state to either stop the flow of air from the source to the piston or to allow air or fluid to flow to the piston.

Rosenbaum discloses the door actuator as described above. However Rosenbaum does not specifically show a control element for preventing air pressure from acting on the piston until the pressure exceeds a predetermined pressure. Werley discloses a compressed gas regulator comprised of a housing having a high-pressure chamber with an inlet passage and a low-pressure chamber with an outlet passage. The passages are separated by a moveable control element, which is connected to a bonnet by a spring. When the bonnet fills with the compressed gas and a force is applied to the control element and this force then opens the regulator when the force overcomes the predetermined spring force. Therefore the control element does not move until a predetermined pressure is reached so as to move the spring. It would have been obvious to one of ordinary skill in the art to have applied a regulator, like that of Werley, to a system, like that of Rosenbaum, thereby giving better control to the operator to open the doors of the system in a slow and controlled manner.

Art Unit: 3617

Rosenbaum discloses the door actuator as described above. However, Rosenbaum does not disclose the doors use on a railroad car. Ward discloses a railroad car with bottom dump doors. It would have been obvious to one of ordinary skill in the art to understand that a door assembly, like that of Rosenbaum, could have been applied to a railroad car, like that of Ward since the two vehicles are substantially the same construction except for the mode of travel with which they are used.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection.

### ***Allowable Subject Matter***

Claims 3-7, 34 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 8-31 are allowed.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3617

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. McCarry, Jr. whose telephone number is (571) 272-6683. The examiner can normally be reached on Monday through Friday 7:00am to 3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joseph Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robert J. McCarry, Jr.  
Examiner  
Art Unit 3617

RJM  
January 19, 2006



S. JOSEPH MORANO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600